

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-43. (Cancelled)

1 ~~44~~. (Previously Presented) A method of identifying a compound as an agonist for an EDG receptor, wherein agonist activation of the EDG receptor activates NF- $\kappa$ B, comprising the steps of:

- a. culturing cells which express said EDG receptor in medium with low-serum or defined medium designed to reduce basal levels of NF- $\kappa$ B activation;
- b. contacting said cultured cells with said compound to be tested for agonist activity at said EDG receptor; and
- c. identifying the compound as an agonist by quantitatively determining NF- $\kappa$ B activation in said cultured cells.

2 ~~45~~. (Previously Presented) The method according to claim ~~44~~, wherein said receptor is selected from the group consisting of EDG-2, EDG-3, EDG-4, EDG-5 and EDG-6.

3 ~~46~~. (Previously presented) A method of identifying a compound as an agonist for an EDG receptor, wherein agonist activation of the EDG receptor produces IL-8, comprising the steps of:

- a. culturing cells which express said EDG receptor in a medium with low-serum or medium designed to reduce basal levels of IL-8 production;
- b. contacting said cultured cells with a candidate compound to be tested for agonist activity at said receptor; and
- c. identifying the compound as an agonist by quantitatively determining IL-8 production in said cultured cells.

4 ~~47~~. (Previously presented) The method according to claim <sup>3</sup>~~46~~, wherein said receptor is EDG-4.

5 ~~48~~. (Previously Presented) A method of identifying a compound as an antagonist for an EDG receptor, wherein agonist activation of the EDG receptor activates NF $\kappa$ B, comprising the steps of:

- a. culturing cells which express an EDG receptor in a medium with low-serum or medium designed to reduce basal levels of NF- $\kappa$ B activation;
- b. contacting said cultured cells with a mixture comprising an agonist and a compound to be tested for antagonist activity at said receptor, wherein said agonist is selected from lysolipid or 20% FBS; and
- c. identifying the compound as an antagonist by quantitatively determining NF- $\kappa$ B activation in said cultured cells.

6 ~~49~~. (Previously Presented) The method of claim ~~48~~<sup>5</sup>, wherein said receptor is selected from the group consisting of EDG-2, EDG-3, EDG-4, EDG-5 and EDG-

6.

7 ~~50~~. (Previously Presented) A method of identifying a compound as an antagonist for an EDG receptor, wherein agonist activation of the EDG receptor produces IL-8, comprising the steps of:

- a. culturing cells which express an EDG receptor in a medium with low-serum or defined medium designed to reduce basal levels of IL-8 production;
- b. contacting said cultured cells with a mixture comprising an agonist and a compound to be tested for antagonist activity at said receptor, wherein said agonist is an lysolipid or 20% FBS; and
- c. identifying the compound as an antagonist by quantitatively determining IL-8 production in said cultured cells.

8 ~~51~~. (Previously presented) The method of claim ~~50~~<sup>7</sup>, wherein said receptor is EDG-4.

52. (Cancelled).

53. (Canceled).

54. (Cancelled).

9 55. (Currently Amended) A ~~method according to claim 53~~, method of identifying a compound as an agonist of an EDG receptor as identified by the amino acid sequence selected from the group consisting of (i) the amino acid sequence comprising SEQ ID NO: 17 and (ii) the amino acid sequence comprising SEQ ID NO: 22, comprising the steps of:

- a. culturing cells which express an EDG receptor;
- b. contacting said cultured cells with a compound to be tested for an agonist activity at said receptor; and
- c. measuring a response indicative of the degree of an agonist activity,

wherein the response measured in step (c) is selected from the group consisting of activation of NFkB, activation of Serum Response Element (SRE), activation of AP-1, and increase in intracellular calcium levels, ~~modulation of cellular cyclic AMP levels and GTP<sub>γ</sub>S binding.~~

10 56. (Previously presented) The method according to claim 55, wherein the response in step (c) is activation of NFkB, or activation of Serum Response Element (SRE), and is measured through a reporter assay.

11 57. (Previously Presented) The method according to claim 55, wherein the response in step (c) is activation of NFkB and is measured by determining the level of cytokines production.

12 58. (Previously Presented) The method according to claim 57, wherein the cytokines are selected from the group consisting of IL-8, IL-6, and GM-CSF.

13 59. (Previously Presented) The method according to claim 58, wherein the level of cytokine production is determined using ELISA.

14 60. (Currently amended) A ~~method according to claim 54,~~ method of identifying a compound as an antagonist of an EDG receptor as identified by the amino acid sequence selected from the group consisting of (i) the amino acid sequence comprising SEQ ID NO: 17 and (ii) the amino acid sequence comprising SEQ ID NO: 22, comprising the steps of:

- a. culturing cells which express an EDG receptor;
- b. contacting said cultured cells with a compound to be tested for an antagonist activity at said receptor; and
- c. measuring a response indicative of the degree of an antagonist activity,

wherein the response measured in step (c) is selected from the group consisting of activation of NFkB, activation of Serum Response Element (SRE), activation of AP-1, and increase in intracellular calcium levels, ~~modulation of cellular cyclic AMP levels and GTP<sub>γ</sub>S binding.~~

15 61. (Previously Presented) The method according to claim 60, wherein the response in step (c) is activation of NFkB, or activation of Serum Response Element (SRE), and is measured through a reporter assay.

16 ~~62~~. (Previously Presented) The method according to claim ~~60~~<sup>14</sup>, wherein the response in step (c) is activation of NFκB and is measured by determining the level of cytokines production.

17 ~~63~~. (Previously Presented) The method according to claim ~~62~~<sup>16</sup>, wherein the cytokines are selected form the group consisting of IL-8, IL-6, and GM-CSF.

18 ~~64~~. (Previously Presented) The method according to claim ~~63~~<sup>17</sup>, wherein the level of cytokine production is determined using ELISA.